

CLAIM LISTING

Please amend the Claims as follows:

This listing of claims will replace all prior versions, and listing, of claims in the application:

Applicant has made a good faith effort to list each and every prior claim, including any amendments or changes thereto (or status thereof) in this "Listing" section, however, should there be any discrepancy between the previous version of a claim (or status thereof) and the listing not explicitly amended, canceled or otherwise changed by this amendment, only the previous version (and status thereof) should be referred to as the intent of the Applicant.

Listing of the Claims:

1. (Currently Amended) A method for facilitating a secure delivery of a document from a sender to a next stage on a routing list, the method comprising the steps of:
receiving an indication that a sender desires to deliver a document to a next stage on a routing list for the document;
identifying a recipient from the next stage of the routing list;
sending an inquiry to a public key database to determine whether the recipient has a public key;
receiving a response to said inquiry, said response selected from the group of said recipient having a public key in said database and said recipient not having a public key in said database;
if said response is said recipient having a public key in said public key database, completing the steps of:
 - (a) retrieving said public key from said public key database and
 - (b) setting a message encryption key for encrypting the document equal to said public key;
 - (c) encrypting the document prior to sending said document using the message encryption key;

if said response is said recipient not having a public key in said public key database, completing the steps of:

- (a) providing an escrow encryption key not equal to the recipient's public key and not equal to the sender's private key, wherein an escrow unencryption key for unlocking said escrow encryption key is not made available to said recipient and
- (b) setting a message encryption key equal to the escrow encryption key;
- (b) encrypting the document using the generated escrow encryption key, and storing the escrow key encrypted document until a new public encryption key is assigned to the recipient;
- (c) assigning a new public encryption key not equal to the generated escrow encryption key and private encryption key to the recipient;
- (d) unencrypting the escrow encryption key encrypted document using an escrow unencryption key and re-encrypting the document using the new public encryption key prior to sending said document using the message encryption key;

~~prior to sending said document using the message encryption key,~~

and providing the public key encrypted document to the recipient.

2. (Original) The method of claim 1 further comprising:
defining and storing the routing list before an originating sender indicates a desire to deliver the document to the routing list.

3. (Original) The method of claim 1 further comprising:
receiving the routing list together with an indication that an
originating sender desires to deliver the document to the
routing list; and
storing the routing list.
4. (Previously Provided) The method of claim 1 further comprising:
sending the message encryption key to the sender.
5. (Previously Provided) The method of claim 4 wherein the step of
sending the message encryption key to the sender comprises:
sending to the sender a digital certificate containing the
recipient's public key.
6. (Previously Provided) The method of claim 4 further comprising:
the sender encrypting the document using the message
encryption key; and
the sender delivering the encrypted document to the recipient.
7. (Original) The method of claim 1 further comprising:
the sender delivering the document to the recipient.
8. (Original) The method of claim 1 wherein:
the routing list is identified by a routing list identifier;
and
the step of receiving an indication that a sender desires to
deliver a document to a next stage on the routing list
includes receiving the routing list identifier.

9. (Previously Provided) The method of claim 8 wherein the routing list identifier includes an email address of said routing list.
10. (Previously Provided) The method of claim 8 wherein the routing list identifier includes an address at a domain name of a web page for routing lists.
11. (Original) The method of claim 1 wherein:
the next stage in the routing list comprises a group of recipients; and
the step of identifying a recipient from the next stage comprises identifying at least one of the recipients in the group.
12. (Original) The method of claim 1 wherein the step of receiving an indication that a sender desires to deliver a document to a next stage on the routing list comprises:
receiving a query from the sender for an identity of a recipient from the next stage of the routing list.
13. (Original) The method of claim 12 further comprising:
tracking a current recipient of the document from the routing list; and
in response to the query:
returning an error message, if the routing list cannot be located or the querying sender is not the current recipient; and
returning the identity of at least one recipient from the next stage of the routing list, if the querying sender is the current recipient.

14. (Original) The method of claim 1 further comprising:
tracking a current recipient of the document from the routing list.
15. (Original) The method of claim 14 further comprising:
receiving confirmation that the recipient has received the document; and
updating the current recipient of the document to reflect the received confirmation.
16. (Original) The method of claim 1 wherein the routing list includes rules.
17. (Original) The method of claim 16 wherein the rules are encapsulated in forms
18. (Original) The method of claim 16 wherein the rules embody a business process.
19. (Original) The method of claim 1 wherein the routing list includes conditional recipients.
20. (Original) The method of claim 19 wherein the step of receiving an indication that a sender desires to deliver a document to a next stage on a routing list for the document comprises:
receiving a parameter from the sender, wherein the recipient depends on the parameter received.

21. (Original) The method of claim 1 wherein the step of receiving an indication that a sender desires to deliver a document to a next stage on a routing list for the document comprises: receiving a form containing rules for the routing list.
22. (Original) The method of claim 1 wherein the step of receiving an indication that a sender desires to deliver a document to a next stage on a routing list for the document comprises: receiving a routing parameter for the routing list.
23. (Original) The method of claim 1 wherein the step of receiving an indication that a sender desires to deliver a document to a next stage on a routing list for the document comprises: receiving the document together with the indication.
24. (Original) The method of claim 23 further comprising: delivering the document to the recipient.
25. (Original) The method of claim 23 further comprising: delivering the document in read-only mode to the recipient.
26. (Previously Provided) The method of claim 23 further comprising:
encrypting the document using the message encryption key before delivering the document to the recipient.
27. (Original) The method of claim 1 further comprising:
authenticating the sender using the sender's public key;
establishing a first secure connection with the sender; and

receiving the document from the sender via the first secure connection.

28. (Original) The method of claim 27 further comprising: authenticating the recipient using the recipient's public key; establishing a second secure connection with the recipient; and transmitting the document to the recipient via the second secure connection.

29. (Currently Amended) A computer program product for facilitating a secure delivery of a document from a sender to a next recipient on a routing list, the computer program product comprising program code adapted to perform the steps of:

receiving an indication that a sender desires to deliver a document to a next stage on a routing list for the document; identifying a recipient from the next stage of the routing list; searching for a public key for the recipient and setting a search-dependent key for encrypting the document depending on the parameter of whether a recipient's public key was found; wherein said key is set equal to a public key of the recipient when the recipient's public key is found; and wherein said key is set equal to a generated escrow encryption key not equal to the recipient's public key when the recipient's public key cannot be located; encrypting the document using the search dependent key; if the search dependent key is equal to the generated escrow encryption key, performing the additional steps of assigning

a new public encryption key and a private encryption key to the recipient not equal to the generated escrow encryption key; unencrypting the escrow encryption key encrypted document using an escrow unencryption key; and re-encrypting key prior to sending the document to the recipient, and using the new public encryption key;
providing on the encrypted document to the recipient.

30. (Previously Provided) The computer program product of claim 29 wherein said escrow unencryption key is not provided to the recipient.

31. (Original) The computer program product of claim 29 wherein: the routing list is identified by an email address; and the step of receiving an indication that a sender desires to deliver a document to a next stage on the routing list includes receiving the email address.

32. (Original) The computer program product of claim 29 wherein: the routing list is identified by an address at a domain name for routing lists; and the step of receiving an indication that a sender desires to deliver a document to a next stage on the routing list includes receiving the address.

33. (Original) The computer program product of claim 29 wherein the step of receiving an indication that a sender desires to deliver a document to a next stage on the routing list comprises:
receiving a query from the sender for an identity of a recipient from the next stage of the routing list.

34. (Original) The computer program product of claim 29 wherein the program code is further adapted to perform the step of: tracking a current recipient of the document from the routing list.
35. (Original) The computer program product of claim 29 wherein the routing list includes rules.
36. (Original) The computer program product of claim 35 wherein the rules are encapsulated in forms.
37. (Original) The computer program product of claim 35 wherein the rules embody a business process.
38. (Original) The computer program product of claim 29 wherein the routing list includes conditional recipients.
39. (Original) The computer program product of claim 38 wherein the step of receiving an indication that a sender desires to deliver a document to a next stage on a routing list for the document comprises:
receiving a parameter from the sender, wherein the recipient depends on the parameter received.
40. (Original) The computer program product of claim 29 wherein the step of receiving an indication that a sender desires to deliver a document to a next stage on a routing list for the document comprises:
receiving the document together with the indication.

41. (Original) The computer program product of claim 29 wherein the step of receiving an indication that a sender desires to deliver a document to a next stage on a routing list for the document comprises:

receiving a form containing rules for the routing list.

42. (Original) The computer program product of claim 29 wherein the step of receiving an indication that a sender desires to deliver a document to a next stage on a routing list for the document comprises:

receiving a routing parameter for the routing list.

43. (Original) The computer program product of claim 29 wherein the program code is further adapted to perform the steps of: authenticating the sender using the sender's public key; establishing a first secure connection with the sender; and receiving the document from the sender via the first secure connection.

44. (Original) The computer program product of claim 43 wherein the program code is further adapted to perform the steps of: authenticating the recipient using the recipient's public key; establishing a second secure connection with the recipient; and transmitting the document to the recipient via the second secure connection.

45. (Previously Provided) An operations center for facilitating a secure delivery of a document from a sender to a next

recipient on a routing list, the operations center comprising:

means for receiving an indication that a sender desires to deliver a document to a next stage on a routing list for the document;

means for identifying a recipient from the next stage of the routing list; and

means for generating an escrow encryption key;

means for searching for a public key for the recipient, and if found, for encrypting the document using the recipient's public encryption key, wherein the recipient's public key is not equal to said escrow encryption key;

means for encrypting the document using the escrow encryption key if the means for searching does not return a public encryption key for the recipient; for requesting the recipient's public key from the recipient; for storing said document in escrow until receipt of the recipient's public key; for unencrypting the document using an escrow decryption key; and for re-encrypting the document using the recipient's encryption key prior to sending the document to the recipient, and

means for providing the recipient's encryption key encrypted document to the recipient.

46. (Previously Provided) The operations center of claim 45 further comprising:

means for sending the escrow encryption key to the sender.

47. (Original) The operations center of claim 45 wherein:

the routing list is identified by an email address; and
the means for receiving an indication that a sender desires to
deliver a document to a next stage on the routing list
includes means for receiving the email address.

48. (Original) The operations center of claim 45 wherein:
the routing list is identified by an address at a domain name for
routing lists; and
the means for receiving an indication that a sender desires to
deliver a document to a next stage on the routing list
includes means for receiving the address.

49. (Original) The operations center of claim 45 wherein the
means for receiving an indication that a sender desires to
deliver a document to a next stage on the routing list
comprises:
means for receiving a query from the sender for an identity of a
recipient from the next stage of the routing list.

50. (Original) The operations center of claim 45 further
comprising:
means for tracking a current recipient of the document from the
routing list.

51. (Original) The operations center of claim 45 wherein the
routing list includes rules.

52. (Original) The operations center of claim 45 wherein the
routing list includes conditional recipients.

53. (Original) The operations center of claim 45 wherein the means for receiving an indication that a sender desires to deliver a document to a next stage on a routing list for the document comprises:

means for receiving the document together with the indication.

54. (Original) The operations center of claim 45 wherein the means for receiving an indication that a sender desires to deliver a document to a next stage on a routing list for the document comprises:

means for receiving a form containing rules for the routing list.

55. (Original) The operations center of claim 45 wherein the means for receiving an indication that a sender desires to deliver a document to a next stage on a routing list for the document comprises:

means for receiving a routing parameter for the routing list.

56. (Original) The operations center of claim 45 further comprising:

means for authenticating the sender using the sender's public key;

means for establishing a first secure connection with the sender;
and

means for receiving the document from the sender via the first secure connection.

57. (Original) The operations center of claim 56 further comprising:

means for authenticating the recipient using the recipient's public key;

means for establishing a second secure connection with the recipient; and

means for transmitting the document to the recipient via the second secure connection.

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